DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015903 Address: 333 Burma Road **Date Inspected:** 26-Jul-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Mr. Geng Wei No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG Segment 11CE**

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Ultrasonic Testing (UT) – Document No: 006285

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Segment 11CE. The weld designations reviewed are as follows:

- 1. SEG 070*-002, 003, 004, 005, 006, 007
- 2. SEG 070A-006, 008, 009, 010

OBG Segment 12AW

This QA inspector observed ZPMC qualified welding personnel identified as 067589 perform Shielded Metal Arc Welding (SMAW) Welding on OBG Segment 12AW, weld joint identified as SEG3004Z-013 and 014. ZPMC QC is identified as Mr. Tang Ya Jun. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2114-FCM-1.

This QA inspector observed ZPMC qualified welding personnel identified as 047864 perform SMAW welding on OBG Segment 12AW, weld joint identified SEG3004F-010. ZPMC QC is identified as Mr. Tang Ya Jun. The

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welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-2G(2F)-Repair.

This QA inspector observed ZPMC qualified welding personnel identified as 051348 perform SMAW welding on corner assembly of OBG Segment 12AW, weld joint identified CA3007-057 to 062. ZPMC QC is identified as Mr. Tang Ya Jun. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-4113-2.

OBG Segment 12 BW

This QA inspector observed ZPMC qualified welding personnel identified as 066179 perform SMAW welding on OBG Segment 12BW, weld joint identified SEG3005G-003. ZPMC QC is identified as Mr. Tang Ya Jun. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-3G(3F)-Repair.

OBG Segment 12CW

This QA inspector observed ZPMC qualified welding personnel identified as 045246 perform Shielded Metal Arc Welding (SMAW) Welding on OBG Segment 12CW, weld joint identified as SEG3006G-154 and 153. ZPMC QC is identified as Mr. Wushi Gao. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-3G(3F)-Repair.

Bay 16

This QA inspector observed ZPMC personnel performed Ultrasonic Testing Inspection on OBG Segment 13BW longitudinal diaphragm welds. The side plate is identified as SP3062A. See the attached picture

This QA inspector observed ZPMC personnel performed heat straitening on Longitudinal Diaphragm to Longitudinal Diaphragm of OBG Segment 13CW, weld joint identified as LD3031-001-004. The HSR report is identified as HSR1(B) 8797 and ZPMC QC is identified as Mr.Li Ming Yang. See the attached picture.

Visual Inspection after Blast

Segment 10BE

This QA Inspector performed a preliminary random visual inspection after the grit blast of the interior components of the deck panel, floor beams and corner assemblies of this segment. Areas of visual weld defects that will require welding were taped and will be repaired after the coating is applied. ZPMC QC personnel are aware of these areas and were present during the inspection.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

| Inspected By: | Kumar, Vibin | Quality Assurance Inspector |
|----------------------|--------------------|-----------------------------|
| Reviewed By: | McClendon, Timothy | QA Reviewer |